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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,791	10/05/2001	Scott S. Lawton	CTK-009.01 (21910-0901)	4143
7590	02/11/2004		EXAMINER	
Scott Lawton Catchmaker 24 Colonial Drive Chelmsford, MA 01824			CHEN, CHONGSHAN	
			ART UNIT	PAPER NUMBER
			2172	6

DATE MAILED: 02/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.	09/972,791		Applicant(s)
Examiner	LAWTON, SCOTT S.		
Chongshan Chen	Art Unit	2172	

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1-33 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)<br>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)<br>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____<br>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)<br>6) <input type="checkbox"/> Other: _____ |
|---|--|

## **DETAILED ACTION**

1. Claims 1-33 are pending in this Office Action.

### ***Claim Objections***

2. Claims 1-33 are objected to because of the following informalities: illegally using bullets in the claim. Appropriate correction is required.
3. Claims 1-3, 5, 9, 28 and 33 are objected to because of the following informalities: inappropriately use the vague term “and/or” in the claim language. It is unclear to the examiner whether the applicant means “and” or “or”, therefore, the examiner interprets the “and/or” term as or. Appropriate correction is required.
4. Claims 11 and 14 are objected to because of the following informalities: inappropriately use the term “if any” in the claim language. It is unclear to the examiner what the applicant means “if any” and the applicant is short of stating “if any” what? Appropriate correction is required.
5. Claims 12 and 16 are objected to because of the following informalities: the applicant states “navigation element is a left-facing **or** up-facing arrow”, and then the applicant states “rendered textually with at one ‘<’ character or rendered graphically”. It is unclear to the examiner the “<” character is associated with which navigation element because the navigation element can be left-facing **OR** up-facing. Appropriate correction is required. Similar correction is required for claim 16.
6. Claim 1 is objected to because of the following informalities: “each data element having some **or** no contents” in lines 4-5. The term “or” means any one of the limitation. It is unclear

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to the examiner which limitation is part of the claimed invention. Appropriate correction is required. Similar correction is required for other claims having the term "or".

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claim 1 recites the limitation "the target data object" in the first limitation of the claim 1. There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required for similar mistake in claims 1-33.

10. Claim 1 recites the limitation "the mechanism" in the 4<sup>th</sup> limitation of the claim 1. There is insufficient antecedent basis for this limitation in the claim.

11. Claim 1 recites the limitation "the title" in the 2<sup>nd</sup> to the last line of page 18. There is insufficient antecedent basis for this limitation in the claim.

12. Claim 1 recites the limitation "the result list" in the 2<sup>nd</sup> line of page 19. There is insufficient antecedent basis for this limitation in the claim.

13. Claim 1 recites the limitation "the result" in the 3<sup>rd</sup> line of page 19. There is insufficient antecedent basis for this limitation in the claim.

14. It is unclear to the examiner what are the target identifier, the list and the target data object in the claim 1. The examiner interprets the target identifier as the search terms the user

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entered, the list as a list of search results match the search terms, and the target data object as a particular result that matches the search terms.

15. Regarding claims 13 and 16, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

16. The dependent claims 2-28 are depend on claim 1.

17. The independent claim 29 recites the limitation "an SDVS as recited in claim 1 ..." is inappropriate.

18. Claim 29 recites the limitation "the navigation control" in the 4<sup>th</sup> limitation. There is insufficient antecedent basis for this limitation in the claim.

19. Claim 29 recites the limitation "the data port" in the 5<sup>th</sup> limitation. There is insufficient antecedent basis for this limitation in the claim.

20. Claim 30 recites the limitation "the output port" in the 5<sup>th</sup> limitation. There is insufficient antecedent basis for this limitation in the claim.

21. The dependent claims 30-32 are depend on claim 1.

22. Claim 33 recites the limitation "the target data object" in the 1<sup>st</sup> limitation. There is insufficient antecedent basis for this limitation in the claim.

23. Claim 33 recites the limitation "the list of data object identifiers" in the 2<sup>nd</sup> limitation. There is insufficient antecedent basis for this limitation in the claim.

24. Claim 33 recites the limitation "the title" in 4<sup>th</sup> limitation. There is insufficient antecedent basis for this limitation in the claim.

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25. Claim 33 recites the limitation "the result list" in the 2<sup>nd</sup> to the last line of the claim.

There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

26. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

27. Claims 1-7, 10-16, 19-27 and 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over SCALEPlus User manual ("SCALEPlus", SCALEPlus User manual, Version 3.0, 20/1/98).

As per claim 1, SCALEPlus teaches a Streamlined Data Viewing System (SDVS) that provides direct access to every data object while viewing any data object on a Visual Display Unit (VDU) via a client process, each data object resulting from searching an Information Location Mechanism (ILM), each data object having a plurality of data elements, each data element having some or no contents, the SDVS comprising:

a controller (SCALEPlus) configured to:

receive the target identifier (the examiner interprets as receiving search terms, SCALEPlus, page 6),

receive the list (SCALEPlus, page 7, the result list),

receive the target data object (the examiner interprets as receiving search result, SCALEPlus, page 7),

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create a navigation control with one navigation element for each data object in the list, with the exception of the target data object, wherein the navigation control uses less display area than the display area occupied by the aggregate of the title of every data object in the list (SCALEPlus, page 9, Prev Doc in Search, Next Doc in Search. In the specification, applicant discloses the "Prev" and "Next" link are navigation elements), and

send the data object and the navigation control to the output port (SCALEPlus, page 6-7); thereby saving a user time by enabling the user to access any data object that met their search criteria without returning each time to the result list that is typically displayed as the result of a search (SCALEPlus, page 9, Prev Doc in Search, Next Doc in Search. By using the Prev or Next Doc, the user can view search result without returning to the result list).

SCALEPlus does not explicitly disclose an instruction port; a list port; a data port; and an output port. However, a port is an interface through which data is transferred between a computer and other devices (such as a printer, mouse, keyboard, or monitor), a network, or a direct connection to another computer (Microsoft Computer Dictionary). Furthermore, the applicant discloses a computer includes all the ports (specification, page 12, lines 3-6). It is obvious the SCALEPlus includes all the ports so that the search system can search the database and pass data between them and return the search result back to the user. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include an instruction port, a list port, a data port and an output port in the system of SCALEPlus so that the search system can search the database and pass data between them and return the search result back to the user.

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As per claim 2, SCALEPlus teaches all the claimed subject matters as discussed in claim 1, and further teaches the instruction port, list port, data port, and/or output port is/are coupled to an HTTP Web server, or coupled to a computer-readable media, or configured to communicate via a standard electronic messaging protocol (SCALEPlus, page 3).

As per claim 3, SCALEPlus teaches all the claimed subject matters as discussed in claim 1, and further teaches the data port is coupled to a document, a database, a database management system, a search engine supporting full-text search, a search engine supporting fielded search, a search engine supporting regular expressions and/or other patterns, and/or an iterative search engine (SCALEPlus, page 4).

As per claim 4, SCALEPlus teaches all the claimed subject matters as discussed in claim 1, and further teaches each data object is comprised of a database record, a document, or some other grouping of associated data elements (SCALEPlus, page 4).

As per claim 5, SCALEPlus teaches all the claimed subject matters as discussed in claim 1, and further teaches each data element is comprised of a database field, tagged data including HTML, XML, or SGML, meta data, and/or a document (SCALEPlus, page 4).

As per claim 6, SCALEPlus teaches all the claimed subject matters as discussed in claim 1, except for explicitly disclosing the data object having at least one data unit of employment information. However, it is obvious the database can store employment information and the SCALEPlus system can be used to search employment information. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employment information in the SCALEPlus system so that the user can search employment information.

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As per claim 7, SCALEPlus teaches all the claimed subject matters as discussed in claim 1, and further teaches the controller is configured to create a navigation element for the target data object (SCALEPlus, page 9, Prev Doc, Next Doc).

As per claim 10, SCALEPlus teaches all the claimed subject matters as discussed in claim 7, and further teaches the navigation element for the target data object is not a hypertext link (SCALEPlus, page 4-10).

As per claim 11, SCALEPlus teaches all the claimed subject matters as discussed in claim 1, and further teaches the controller is configured to add an additional navigation element linked to the data object prior to the target data object, if any (SCALEPlus, page 4-10).

As per claim 12, SCALEPlus teaches all the claimed subject matters as discussed in claim 11, except for explicitly disclosing the additional navigation element is a left-facing or up-facing arrow, rendered textually with at least one "<" character or rendered graphically.

However, "<" character is used to return to previous result. SCALEPlus teaches a navigation element allows the user to go to the previous or next search result (SCALEPlus, page 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use "<" character as the navigation element in the SCALEPlus system so that the user can go back to previous search result.

As per claim 13, SCALEPlus teaches all the claimed subject matters as discussed in claim 11, and further teaches the additional navigation element for the target data object comprises a text label such as "PREV" or "PREVIOUS," or similar word or phrase in English or other language (SCALEPlus, page 9).

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As per claim 14, SCALEPlus teaches all the claimed subject matters as discussed in claim 1, and further teaches the controller is configured to add an additional navigation element linked to the data object following the target data object, if any (SCALEPlus, page 4-10).

Claims 15-16 are rejected on grounds corresponding to the reasons given above for claims 12-13.

As per claim 19, SCALEPlus teaches all the claimed subject matters as discussed in claim 1, and further teaches each navigation element can be activated by a user with a single action using a UD (SCALEPlus, page 4-11).

As per claim 20, SCALEPlus teaches all the claimed subject matters as discussed in claim 19, and further teaches the single action is a click or tap (SCALEPlus, page 4-11).

As per claim 21, SCALEPlus teaches all the claimed subject matters as discussed in claim 1, and further teaches the single action is press-drag-release (SCALEPlus, page 4-11).

As per claim 22, SCALEPlus teaches all the claimed subject matters as discussed in claim 1, and further teaches the navigation elements are arranged horizontally (SCALEPlus, page 4-11).

As per claim 23, SCALEPlus teaches all the claimed subject matters as discussed in claim 1, and further teaches the navigation elements are arranged vertically (SCALEPlus, page 4-11).

As per claim 24, SCALEPlus teaches all the claimed subject matters as discussed in claim 1, and further teaches the target identifier is a data element identifier (SCALEPlus, page 4-11).

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As per claim 25, SCALEPlus teaches all the claimed subject matters as discussed in claim 1, and further teaches the target identifier is an index into the list (SCALEPlus, page 4-11).

As per claim 26, SCALEPlus teaches all the claimed subject matters as discussed in claim 1, except for explicitly disclosing a list identifier port. However, a port is an interface through which data is transferred between a computer and other devices (such as a printer, mouse, keyboard, or monitor), a network, or a direct connection to another computer (Microsoft Computer Dictionary). Furthermore, the applicant discloses a computer includes all the ports (specification, page 12, lines 3-6). It is obvious the SCALEPlus includes a list port so that the search system can search the database and pass data between them and return the search result back to the user. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a list port in the SCALEPlus system so that the search system can search the database and pass data between them and return the search result back to the user.

As per claim 27, SCALEPlus teaches all the claimed subject matters as discussed in claim 26, except for explicitly disclosing the list identifier port and the instruction port are the same port. However, a port is an interface through which data is transferred between a computer and other devices (such as a printer, mouse, keyboard, or monitor), a network, or a direct connection to another computer (Microsoft Computer Dictionary). Furthermore, the applicant discloses a computer includes all the ports (specification, page 12, lines 3-6). It is obvious the list identifier and the instruction port would be the same port because they are both used to transfer data.

Claim 29 is rejected on grounds corresponding to the reasons given above for claim 1.

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As per claim 30, SCALEPlus teaches all the claimed subject matters as discussed in claim 29, and further teaches the controller of the SDVS creates a formatted representation of the navigation control employing a markup language including HTML, XML or SGML (SCALEPlus, page 4-10).

Claim 31 is rejected on grounds corresponding to the reasons given above for claim 6.

As per claim 32, SCALEPlus teaches all the claimed subject matters as discussed in claim 29, and further teaches a sort port configured to receive sort criteria; an Information Sorting Mechanism (ISM) coupled between the ILM and the formatting engine; the ISM being configured to receive the sort criteria in a predetermined syntax, receive a plurality of data objects from the ILM, sort the data objects according to the sort criteria, and forward the sorted data objects to the VDU (SCALEPlus, page 1).

Claim 33 is rejected on grounds corresponding to the reasons given above for claim 1.

28. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over SCALEPlus User manual ("SCALEPlus", SCALEPlus User manual, Version 3.0, 20/1/98) in view of Publishing a FileMaker Pro 4/5 Database on the Web: A Tutorial ("FileMaker").

As per claim 8, SCALEPlus teaches all the claimed subject matters as discussed in claim 7, except for explicitly disclosing the navigation element for the target data object has a different appearance than the navigation elements for other data objects. FileMaker discloses the navigation element for the target data object has a different appearance than the navigation elements for other data objects (FileMaker, page 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have different appearance

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with different data object in the SCALEPlus system in order to format the data object for better display result.

As per claim 9, SCALEPlus and FileMaker teach all the claimed subject matters as discussed in claim 8, and further teach the appearance is made visually distinct by changing the geometry, layout, text font or typeface, text size, text style, text color and/or background color of part or all of the navigation element for the target data object (FileMaker, page 4).

29. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over SCALEPlus User manual ("SCALEPlus", SCALEPlus User manual, Version 3.0, 20/1/98) in view of Nielsen (6,021,435).

As per claim 17, SCALEPlus teaches all the claimed subject matters as discussed in claim 1, except for explicitly disclosing each navigation element is configured such that the client process will display, on the VDU, additional information about the associated data object when a user moves a UD over the navigation element. Nielsen discloses each navigation element is configured such that the client process will display, on the VDU, additional information about the associated data object when a user moves a UD over the navigation element (Nielsen, col. 2, lines 5-6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to display the title of the data object when a user moves a cursor over the navigation element in the SCALEPlus system to help the user decide whether a particular link is worth following. This increases the efficiency of user browsing.

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As per claim 18, SCALEPlus and Nielsen teach all the claimed subject matters as discussed in claim 17, and further teach the additional information is the title of the target data object (Nielsen, col. 2, lines 5-6).

30. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over SCALEPlus User manual ("SCALEPlus", SCALEPlus User manual, Version 3.0, 20/1/98) in view of Mattis et al. ("Mattis", 6,128,627).

As per claim 28, SCALEPlus teach all the claimed subject matters as discussed in claim 1, except for explicitly disclosing a data cache configured to store a copy of zero or more data objects; a cache manager configured to: check if the target data object is already stored in the data cache; if not, get a copy of the data object via the data port and store it in the data cache; return a copy of the data object from the data cache to the controller; and wherein the controller is configured to receive the data objects from the cache manager and/or from the data port. Mattis discloses a data cache configured to store a copy of zero or more data objects; a cache manager configured to: check if the target data object is already stored in the data cache; if not, get a copy of the data object via the data port and store it in the data cache; return a copy of the data object from the data cache to the controller; and wherein the controller is configured to receive the data objects from the cache manager and/or from the data port (Mattis, col. 1, line 53 – col. 2, line 59). It is well known in the art that the retrieval process will try to read data from cache first before request data from other network locations. Also, it is well known in the art that read from cache is much faster than retrieve data from other storage location. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to read data from cache in the SCALEPlus system to improve search speed.

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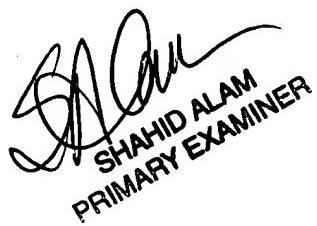
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chongshan Chen whose telephone number is 703-305-8319. The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (703)305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 2, 2004



SHAHID ALAM  
PRIMARY EXAMINER